

NAVAL WAR COLLEGE
Newport, RI

Vicksburg: Prologue to Joint Operations

by

Robert A. Bellitto

LCDR, USN

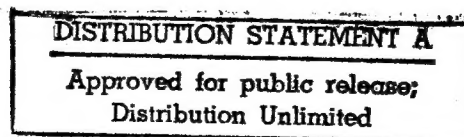


A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Operations Department program.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature Robert A. Bellitto

08 March 1995



INFO QUALITY INSPECTED 8

19950417 007

1. Report Security Classification: Unclassified			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: Joint Military Operations Department			
6. Office Symbol: 1C		7. Address: Naval War College, 686 Cushing Rd., Newport, RI 02841-5010	
8. Title (Include Security Classification): Vicksburg: Prologue to Joint Operations (U)			
9. Personal Authors: Bellitto, Robert Anthony, LCDR, USN			
10. Type of Report: Final		11. Date of Report: 950213	
12. Page Count: 22			
13. Supplementary Notation: A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Joint Military Operations Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.			
14. Ten key words that relate to your paper: Joint Operations, Vicksburg, Grant, Sherman, Foote, Farragut, Mississippi River, Pemberton			
15. Abstract: The ability of Union forces to utilize the unique capabilities of both Army and Navy assets during the Vicksburg campaign acted as a force multiplier of the first magnitude. Due to the paucity of reliable road and rail networks, the immaturity of theater infrastructure, and the vast distances involved naval forces permitted the theater commander flexibility to transport and support his troops. Additionally the combat power resident in these forces were also utilized as operational fires in support of maneuver ashore. Conversely Confederate forces were limited to a static defense once their ships were swept from the river. This lack of mobility and subsequent loss of initiative lead to eventual defeat.			
16. Distribution/ Availability of Abstract:	Unclassified XX	Same As Rpt	DTIC Users
18. Abstract Security Classification: Unclassified			
19. Name of Responsible Individual: Chairman, Joint Military Operations Department			
20. Telephone: (401) 841-3414/4120		21. Office Symbol: 1C	

Vicksburg: Prologue to Joint Operations

Abstract: The ability of Union forces to utilize the unique capabilities of both Army and Navy assets during the Vicksburg campaign acted as a force multiplier of the first magnitude. Due to the paucity of reliable road and rail networks, the immaturity of theater infrastructure, and the vast distances involved naval forces permitted the theater commander flexibility to transport and support his troops. Additionally the combat power resident in these forces were also utilized as operational fires in support of maneuver ashore. Conversely Confederate forces were limited to a static defense once their ships were swept from the river. This lack of mobility and subsequent loss of initiative lead to eventual defeat.

Accession For	
NTIS	CRA&I <input checked="" type="checkbox"/>
DTIC	TAB <input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

Vicksburg: Prologue to Joint Operations

Joint operations, conducted in the predominantly austere environment of the Mississippi River Valley, granted Union forces both initiative and flexibility in maneuver warfare, logistics support, and operational fires which ultimately lead to victory. Due to the duration of the Vicksburg campaign, the vast distances involved, and the immaturity of the theater, joint operations permitted the theater commander (Ulysses S. Grant) to maximize his options. When joint capabilities were matched with foresight and creativity in planning, these unique forces were applied with considerable advantage against a numerically superior enemy operating defensively in its own territory. These operations successfully limited the enemy to a single element of combat power, land forces, thereby removing tactical and logistic flexibility and initiative. The subsequent synergistic effect of unencumbered U.S. assets became a force multiplier of the first magnitude.

Early during the Civil War President Abraham Lincoln approved Plan Anaconda to divide the Confederacy in two. A careful analysis of census and commerce data revealed that the majority of Confederate foodstuffs, livestock, and significant amounts of foreign purchased military goods passed along the Mississippi River. The plan, simply put, was to assume control of the Mississippi River and deny access to Southern ports along the Atlantic and Gulf coasts. This would deny the Confederate armies in the East, the perceived centers of gravity, both necessary supplies and replacements.¹ The successful U.S. Navy blockade of Southern ports had the dual effect of prohibiting cotton exports

which were used to generate revenue as well as denying the ability to purchase European commercial and military goods. Since virtually all military hardware prior to the Civil War was produced in the industrial North, the blockade's effectiveness was devastating to the Confederate war effort.²

The first phase of the emerging Vicksburg campaign was the capture of New Orleans in April, 1862. This was the first example of joint operations in the Mississippi region and therefore bears some study. U.S. Navy forces under Flag Officers David C. Farragut and David Porter proceeded up the Mississippi in order to isolate the largest operating Confederate port. Farragut hoped that a rapid occupation of New Orleans would also have a secondary strategic result of freeing limited naval assets for Eastern blockade duty.

The initial Union plan was for Farragut to destroy two old forts south of New Orleans, and then link up with troops marching from the coast to occupy the city.³ The Confederacy had limited ground forces available in theater, having sent large elements to the East. Rather than utilize infantry for defense, Confederate operational planners had chosen to rely upon the perceived impregnability of fixed defensive positions as an economy of force.

Initially this analysis proved correct as the Union fleet was unable to take the forts directly. Additionally, supporting troop movements were limited by terrain and weather.⁴ The Confederates incorrectly declared this tactical stalemate as operational victory.

This was a strategic error of epic proportions. Farragut as a naval officer was a practitioner of maneuver warfare, unlike his opponents who were still mired in the dogma of conventional forces "slugging it out". The Confederates failed to realize that one of the subsumed primary Union tasks had already been accomplished. Although not in custody of New Orleans, Farragut had succeeded in sealing off the port; European supplies could not bypass the Fleet occupying the southern part of the river. The Union was proceeding towards accomplishing the strategic mission of isolating the Confederacy.

Secondly, Farragut was flexible in both his operational and tactical planning. Realizing the futility of continuing his current plan he moved to the next level of warfare and found an operational solution to a tactical problem which would fully accomplish his mission--occupying New Orleans. By using Porter's gunboats; armed with mortars, as operational fires to engage the enemy, Farragut simply sailed past the forts and occupied defenseless New Orleans. The forts outmaneuvered, had now lost their importance and capitulated.⁵ This example of maneuver warfare permitted the Fleet's main elements and supporting Army units to avoid a costly battle and still meet both the operational and strategic objective. This component of the campaign utilized independent naval and army forces who in reality did not operate directly together. Although unity of command was not directly present, unity of effort was. The synergistic effect of the individual capabilities of the component forces were strategically

relevant.

Farragut did not truly "occupy" New Orleans until Army forces arrived to do so. Prior to that time the occupation existed in theory only. Naval forces transported Army units to the area and logistically supported them. Operational fires provided by afloat units also denied enemy activity around the city and on the river permitting these forces to concentrate on activity within the city without significant external threat. Conversely Farragut was now free to move north and join Grant. Therefore the campaign's first "joint operation" was complementary in nature.

Concurrent to this operation Grant was moving down the Mississippi and Ohio Rivers. Due to the paucity of road networks and the limited railways Grant relied upon the rivers for logistics and transport. Control of these river was the key to the campaign.⁶

By controlling the Mississippi and allowing unimpeded access from the Ohio River Valley to the sea, the Union would succeed in isolating the Confederacy from her interior and exterior support. Additionally U.S. commerce could once more flow unmolested to foreign markets, earning capital for politically important western states.⁷ Militarily this encirclement would also permit a multi-pronged attack on the Confederates in the east which would further strain this resource limited force. Grant understood the necessity of controlling the river and moved to meet Farragut quickly.⁸

Operating from a secure logistics base in Illinois, Grant was able to receive additional troops and unlimited supplies along the

river. Initially, small Confederate naval forces were operating in the vicinity of Memphis.⁹ These forces, during the summer of 1862, proved the only real challenge to Union advances. Grant fully cooperated with Flag Officer Andrew H. Foote to clear this small Rebel fleet and capture Memphis as an advance logistics base/staging area to move south.¹⁰

Despite diverging paths of procurement whereby both Army and Navy officers contracted for the production and conversion of naval units, these Union ships were *commanded and manned* by hastily recruited *sailors and soldiers*.¹¹ Militarily these units were able to deal with a variety of Confederate rams, gunboats, and shore batteries to great effect. Joint operations afloat by these "two navies" confirmed the commanders' personal spirit of co-operation. This recurring theme of cooperation between Army and Navy leaders was perhaps the most important operational development in the early stages of the campaign. Based on Grant and Foote's personal interaction, cooperation, and mutual respect the foundation was laid for a unity of effort which transcended wartime politics and a lack of formal command and control architecture.¹²

Up to this point, the Union command structure was for both services to operate independently under separate orders from Washington. Although directions called for "cooperation and mutual support" no real unity of command, force structure or organization ever existed. Fortunately, the senior officers assigned in the West clearly understood the strategic mission they were detailed. The personalities were able to place the task at hand in proper

perspective and this contributed tremendously to victory. It is noteworthy that this inter-service cooperation was developed during a period of intra-service rivalry.¹³

The Confederate command structure was more convoluted with respect to naval units. This was no doubt due to a smaller cadre of both assets and officers to command them. Mid-grade Army and Navy officers conferred on situational tactics but never at the operational or strategic level. This lack of coordination was not limited to inter-service operations, it was also present within the theater itself between the military departments and armies.¹⁴

This phenomenon also became a recurring theme of the campaign. Vicksburg's defender, Lieutenant General John C. Pemberton, personally received contradictory orders from both President Jefferson Davis and his operational commander General Joseph E. Johnston.¹⁵ Additionally, actions between Pemberton and Johnston appeared never to be complementary within the scope of a larger operational level of warfare. By acting individually and without coordination or a larger view of the conflict, the advantages of numerical superiority and friendly populations/terrain were squandered with catastrophic results.

Strategically, the precursor to successful Union operations against the Confederacy in the East was victory on the Mississippi. Both sides obviously concurred with this concept, at least in theory, from discussions at their respective capitals. Whereas the Union sent limited but sufficient forces to accomplish this mission, the Confederacy appeared to view the campaign as a "fait

accompli." Strong guidance was given yet insufficient resources were made available to do more than delay Union progress.¹⁶ This mishandling in the allocation of scant resources between major theaters lead to the virtual abrogation of initiative to Grant; the results were predictable.

Due to the scant naval assets available, actions to deny Union control of the northern Mississippi were piecemeal with only temporary tactical effect. Confederate officers, acting on sketchy orders and personal initiative, successfully achieved miracles in turning commercial and partially completed hulls into a variety of "men of war." They successfully raided Union naval assets and succeeded in embarrassing Farragut during the Summer, 1862 assaults on Vicksburg.¹⁷ Yet at the operational level these incidents were little more than aberrations within the larger scope of Union activity. No Confederate unity of effort was apparent. A coordinated action between the limited naval forces to raid vulnerable Union lines of communication north of Vicksburg might have succeeded in drawing off assets to meet this threat. A limited, but concerted effort might have yielded operational victory by causing Union plans to be modified thereby delaying the "inevitable" loss of Vicksburg.

Unfortunately for the Confederacy, the naval forces involved simply moved directly towards one of the strongest Union centers of gravity, the Fleet. They caused some minor discomfort before being summarily defeated. The effect on the campaign was minuscule.¹⁸

Once Confederate naval forces were effectively destroyed in

1862, only the artillery on the bluffs of Vicksburg prevented the free movement of Union river traffic to the sea.¹⁹ The Union viewed the city as a critical point which must be eliminated to prevent this blocking effect on their lines of communication.

Initially Farragut and Porter bombarded the city during the Summer of 1862 to no effect.²⁰ However, naval forces had by their presence accomplished the second part of the strategic mission by preventing east-west commerce across the Mississippi. Vicksburg, besides controlling the river, was also the key transshipment point of supplies via rail from Texas to the east. With the capture of New Orleans and the denial of trade on both coasts the Confederacy was forced to trade through Texas and Mexico with Europe. This break further affected operations in the east.

When unable to directly take the city, Grant attempted to bypass it's combat power and open the Mississippi. The Union tried a variety of maneuvers and civil engineering projects to no avail. Initially Sherman and Porter hoped to build a canal west of the Vicksburg bend in the river and to pass the fortress unimpeded, thereby nullifying the strategic importance of Vicksburg. Sherman utilized recently freed slaves and his own troops in an attempt to dig a canal. Despite a winter of concerted effort they failed.²¹

Concurrent to these events, Grant attempted to maneuver around Vicksburg by proceeding overland from Memphis via land routes, parallel to existing railbeds.²² Southern cavalry, rain, and hostile terrain denied him the ability to construct sufficient corduroy roads to move at more than a snail's pace. These

pressures on his vulnerable supply lines eventually forced retreat.²³ The Mississippi remained closed.

Desperate to get at Vicksburg, Porter attempted during the Spring floods of 1863 to literally sail his shallow draft vessels down roads and across fields. This unorthodox tactic of moving from the Mississippi, up the Yazoo River, and then across wooded areas brought some limited hope for success. Confederate troops, however, were able to place significant encumbrances to Porter's progress such as fallen trees, which stymied him in the shallow flood regions of Mississippi. Sherman, an enthusiastic supporter of this maneuver, was forced to utilize his troops embarked on slower transports to relieve Porter from pending infantry assault.²⁴

This was another unique example of joint support in the immature portions of the theater. By throwing convention to the wind, Porter had successfully scouted his area of responsibility and developed an unconventional response to a unique strategic problem. He demonstrated the ability to move his vessels and embarked troops in ways heretofore unimagined. Although unsuccessful this action bode well for future cooperation and ultimate victory.²⁵

Southern forces lacked this demonstrated mobility in tactics or planning. The Confederate reaction to a winter of Union probing, colossal engineering projects, and innovative tactics was continued reliance on a well-entrenched defense. Perhaps they had no other choice. Yet in hindsight it appears that a cooperative

effort between Johnston and Pemberton to move against Memphis and attack Grant's base of supply would have been worthy of study.

A deep penetration against Union forces was technically feasible at the time. It is true that such an act might leave Vicksburg without adequate infantry defenders but the ability to assault was not present in Union forces at the time. It would be difficult for the Confederacy to support such an action but the railway and supply head at Jackson, Mississippi was still intact and a viable jumping off point. Even if this activity appeared too large in scope, a series of small-scale raids could have at least been considered to remove the initiative from the Union.

No action occurred. The Confederacy continued to wait with activity limited to cavalry raids.²⁶ It is of note that these raids were largely successful and should have given commanders pause to reconsider plans based on the tactical successes of aggressive subordinate commanders. There was no strategic reassessment.

The primacy of politics with respect to wartime action was also curiously lacking from Confederate operations in the West. As recently as August-September 1862 Robert E. Lee had attempted to draw a strategic success by his initial assault into Maryland and Pennsylvania. Lee's intentions had been to force an engagement on Northern soil which might lead to political victory for the South. Since the Emancipation Proclamation had not yet been issued, elevating the struggle to a "value-based war," British interest had been to settle the conflict quickly and reopen recession idled

textile industries. The loss of Southern cotton was having a devastating effect on the British economy. Additionally Napoleon III's designs on Mexico would have been better served by a viable Confederacy. Lee's offense, stymied at Antietam, were designed within a larger political context of forcing European action.

It appears that during the Vicksburg campaign Confederate commanders neglected to retain or even explore a political focus of their combat actions. This is not to say that operations should have been timed to meet political and economic agendas of potential European allies; rather there appears to be no contemplation concerning the strategic value of operations to the overall cause.

Conversely Grant was astute with respect to politics. During the difficult summer and fall of 1862 he sensed the wavering political feelings of the Democratic Party peace activists, most notably those in the Western states. Consequently his actions remained offensive in nature. Grant surmised that a constant stream of small activity was beneficial for both his army and the nation's future.²⁷

Within this political context Grant and Porter received continual pressure to open the Mississippi as quickly as possible. Grant continued the offense throughout the winter and Porter maintained harassing action on Vicksburg to keep the enemy off balance. In reality, the constant Union maneuvers to outposition the enemy and bypass Vicksburg had the secondary effect of creating a high level of confusion within the southern camps. This operational deception, carefully orchestrated during the Spring and

Summer of 1863, matured into a significant force multiplier for the overall success of the campaign.²⁸

In the Spring of 1863 Grant decided to move the bulk of troops via the river, past the guns of Vicksburg and disembark on the eastern side. This action consisted of Porter's gunboats shelling the city while transports and supply ships slipped by.²⁹

This bold action placed Grant on the same side of the river as his objective and began the final movements of the campaign. Realizing that speed was essential, Grant left his supply wagons behind except for ammunition trains. This also permitted a preponderance of forces to be available for combat at critical points and not held in defensive positions at supply dumps. By foraging off the rich land and relieving himself of logistic constraints, Grant moved effectively in hostile territory.³⁰

This action might have been disastrous if the Confederates had responded. Yet these forces were unaware of specific Union movements since their intelligence gathering arm, the cavalry, had been dispatched by Pemberton to Tennessee.³¹ It was therefore unknown that Grant was relying on forage and was vulnerable to a scorched-earth policy. The destruction of foodstuffs and livestock would have forced Union retreat. Additionally a weakened force attacked by sufficient Confederate troops, moved south from Vicksburg, could have resulted in Union disaster. Again, no such aggressive action by cautious Confederates occurred. Union maneuvers and Confederate allocation of scarce resources had removed all initiative and a winter of small scale actions had sowed the

seeds of doubt as to which activity was real and which deception.

As a result of both operational deception and successful maneuver, Grant was now in a position to isolate Vicksburg. Recognizing the frailty of his position even if his enemy did not, Union forces moved quickly. Troops moved north to Jackson, briefly occupying it and destroying railroad and military facilities.³² This would hopefully delay Confederate reinforcements for the period of time necessary to defeat Vicksburg.

Once Jackson was taken, Union forces continued without pause to move on Vicksburg. Despite battle at Champion Hill and several smaller engagements, the Confederates were unable to do more than slow Union momentum slightly. Within two days Grant was on the outskirts of the city and he attempted to take it directly.³³

Despite Confederate inactivity in Mississippi itself the previous months had been used to strengthen the city's defenses. Significant effort had been placed in developing a series of forts/trenches/breastworks and supporting fields of fire. Despite these formidable defenses Grant proceeded to assault the city directly, hoping for a quick victory.

On 19 May 1863 Union forces assaulted the works of the Confederacy. Despite well-planned action and sufficient numbers of troops the defenses were too well developed. All Union attacks failed with a relatively high casualty rate. Grant, not one to squander human life, then besieged the city.³⁴

Despite methodical approaches of mines/countermines and trench warfare in attempts to overcome defensive obstacles, Grant did not

resort to useless attacks "over the top." Rather he relied on economies of force and effort while utilizing his relative strengths in position and force structure. By utilizing organic artillery and requesting Porter to do the same he used operational fires to isolate and harass his enemy. The resulting incessant barrage forced the city and its defenders to move underground for the duration. Furthermore, Union forces were resupplied across the Mississippi and were in a relative position of logistical strength whereas Confederate food and ammunition dwindled daily.³⁵

Grant also realized that he could not maintain the siege indefinitely. Although the Confederates had heretofore moved slowly, Johnston maintained sufficient force in theater to threaten Grant's eastern flanks. A combined breakout by Pemberton or movement towards the Union rear by Johnston could have found Grant outnumbered and outmaneuvered. Union forces relied on the lack of aggressiveness demonstrated to date as well as Sherman's presence as a blocking force to maintain the siege.³⁶

As the weeks passed Confederate combat power dwindled due to the paucity of fresh supplies, Union operational fires, and disease. Grant meanwhile received additional fresh, well-equipped troops and was logistically well supported via the river despite Johnston's movement to Jackson, twenty miles to the east.

A Confederate reassessment of the situation was finally called for by Pemberton. This local commander had previously received conflicting orders. His theater commander viewed Vicksburg lost. Johnston correctly surmised that there was nothing either he nor

his subordinate could do to prevent the eventual Union occupation of Vicksburg and the subsequent reopening of the Mississippi. In view of this predicament, Johnston felt that the true center of gravity for the Confederacy was not the city but the army that defended it. He therefore ordered the city abandoned.³⁷

Pemberton also held direct orders from the President to hold Vicksburg, thereby postponing Union victory.³⁸ Pemberton chose to disregard his immediate superior's orders and follow a course of action more to his proclivity, defense. This course of action sealed the fate of his army.

Grant's view of the campaign was noticeably different. Although he sought to defeat his enemy in the field he understood the larger scheme of his campaign. Rather than viewing Vicksburg at the tactical level he was able to view the city and the campaign at both the operational and strategic level. The defeat of Pemberton and the occupation of Vicksburg were subsidiary tasks; the main objective was to open the Mississippi and deny it to the Confederacy. Vicksburg was a means to an end, not an end itself.³⁹

Within these two levels of analysis are the realities of the campaign. Grant occupied his position as a theater commander. He remained focused on a task that was within his purview and sought to accomplish it directly. By exploring a variety of military options, working closely with his naval counterparts, and utilizing all the elements of combat power, maneuver, and deception at his disposal, he was able to effectively prosecute a series of battles in order to accomplish his primary task.

In stark contrast, Confederate commanders remained unfocused with no displayed unity of effort. The lack of coordination between armies, commanders, and services was symptomatic of a bigger problem-the inability to coordinate action within a larger picture. As a result, smaller tactical actions were viewed as isolated incidents rather than component parts of a larger plan. This piecemeal activity served only to expend scant resources and had little dampening effect on the campaign outcome.

In reality, the best plan for the Confederacy might have been to simply abrogate the Mississippi to the Union and move their armies and equipment east in support of Lee and his activities in Virginia. It is worthy of consideration that an additional 80,000 troops at Gettysburg, an operation occurring concurrent to the final days of Vicksburg, would have changed the course of the war and the future of the United States. A Confederate victory of such magnitude would have left Philadelphia, Baltimore, and Washington itself vulnerable. The results would have been cataclysmic.

In fact, however, Confederate troops in Vicksburg remained at their posts until exhausted by lack of food, water, and respite. They were unable to break out, and after several weeks under siege were forced to surrender on 4 July 1863, concurrent to Lee's retreat after defeat in Gettysburg 1-3 July. Two of the most important battles of the war were terminated within 24 hours of each other.⁴⁰

In the final analysis the joint forces of the Union permitted Grant the ability to assume the offense and take the fight to the

enemy. Due to the unique capabilities resident in each service, this theater commander was able to maximize his options and design operations from a wide breadth of attributes which were then utilized by tactical commanders to great effect. In the immature theater of the Vicksburg campaign, these abilities permitted both initiative and capability to try, and often fail, without suffering catastrophic losses to Union force structure or momentum.

Confederate forces remained on the defensive throughout the struggle. Unable to effectively deal with the wide ranging capabilities of Union forces with respect to mobility, logistic support, and operational fires they remained unfocused and reactive. Due to a distinct lack of unity of effort and command, the considerable defensive advantages resident in their forces were squandered with devastating results.

Besides the Union success of the Vicksburg campaign itself, the lessons learned of economy of force, unity of command, and synergistic capabilities were transferred to the remaining struggle in the East. The ability of complimentary joint forces to defeat a well entrenched enemy would bear much fruit for Union efforts in Charleston and Fort Fisher in the years ahead. Vicksburg became a turning point in the war both politically and militarily with respect to future doctrine. The momentum of the campaign, and its commander, would lead to eventual Union victory two years hence.

Endnotes

1. Alan Hankinson, Vicksburg 1863: Grant Clears the Mississippi (London: Osprey Military, 1993), p.7.
2. U.S. Department of the Interior, Vicksburg and the Opening of the Mississippi River, 1862-1863 (Washington, D.C.: 1986), pp.7,11.
3. David Martin, The Vicksburg Campaign: April, 1862-July, 1863 (New York: Gallery Books, 1990), p.19.
4. Martin, pp.19,22.
5. Martin, p.36.
6. U.S. Department of the Interior, p. 7.
7. Jerry Korn, War on the Mississippi: Grant's Vicksburg Campaign (Alexandria, Va.: Time-Life Books, 1985), p. 16.
8. Robert H. Fowler, ed. Struggle for Vicksburg (Harrisburg, Pa.: Historical Times, 1967), p. 4.
9. Martin, pp.39,46.
10. Martin, pp. 10-11, 13.
11. Scott W. Stucky, "Joint Operations in the Civil War," Joint Forces Quarterly, 6, (Autumn-Winter 1994-1995), p. 95.
12. Stucky, pp. 98-99.
13. Stucky, pp.98-99.
14. Korn, pp.59-60.
15. Hankinson, p.48.
16. Fowler, p.7.
17. Martin, pp. 39,45-46.
18. Martin, pp. 61-63.
19. Martin, p.47.
20. Martin, p. 37.
21. Hankinson, p.27.
22. Hankinson, p.19.
23. Hankinson, pp. 19-20.
24. U.S. Department of the Interior, pp.24-29.

- 25.Korn, p.80.
- 26.U.S.Department of the Interior, p. 17.
- 27.Hankinson, p. 32.
- 28.Fowler, pp. 14-15.
- 29.Korn, p.84.
- 30.Hankinson, p.89.
- 31.U.S.Department of the Interior, p.24.
- 32.U.S.Department of the Interior, pp.36-37.
- 33.U.S.Department of the Interior, pp. 42-44.
- 34.U.S.Department of the Interior, p. 46.
- 35.U.S.Department of the Interior, pp.55-59.
- 36.Martin, p. 173.
- 37.U.S.Department of the Interior, p.41.
- 38.U.S.Department of the Interior, p.36.
- 39.Fowler, p.26.
- 40.Fowler, p.61.

Bibliography

- Faust, Patricia L., ed. Historical Times Illustrated Encyclopedia of the Civil War. New York: Harper and Row Publishers, 1991.
- Fowler, Robert H., ed. Struggle for Vicksburg. Harrisburg, Pa.: Historical Times, Inc., 1967.
- Hankinson, Alan. Vicksburg 1863: Grant Clears the Mississippi. London: Osprey Military, 1993.
- Kennedy, Frances H., ed. The Civil War Battlefield Guide. Boston: Houghton Mifflin Company, 1990.
- Korn, Jerry. War on The Mississippi: Grant's Vicksburg Campaign. Alexandria, Va.: Time-Life Books, 1985.
- Martin, David. The Vicksburg Campaign: April, 1862-July, 1863. New York: Gallery Books, 1990.
- Moen, Frank. "Joint Operations: Vicksburg Campaign 1863." A Common Perspective. 1 (September, 1993), 11-12.
- Stucky, Scott W.. "Joint Operations in the Civil War." Joint Forces Quarterly, 6 (Autumn-Winter 1994-1995), 92-105.
- Symonds, Craig L.. A Battlefield Atlas of the Civil War. Annapolis: The Nautical and Aviation Publishing Company of America, 1983.
- U.S. Department of Defense. Joint Doctrine Capstone and Keystone Primer. Washington, D.C.: 1994.
- U.S. Department of Defense. Joint Publication 1. Washington, D.C.: 1991.
- U.S. Department of the Interior. Vicksburg and the Opening of the Mississippi River, 1862-1863. Washington, D.C.: 1986.